



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,055	03/31/2006	Gijsbertus Johannes Verduijn	790063.00090	8515
26710	7590	12/04/2007		
QUARLES & BRADY LLP 411 E. WISCONSIN AVENUE SUITE 2040 MILWAUKEE, WI 53202-4497			EXAMINER DEUBLE, MARK A	
			ART UNIT 3651	PAPER NUMBER
			MAIL DATE 12/04/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication. .

Office Action Summary	Application No. 10/538,055	Applicant(s) VERDUIJN ET AL.	
	Examiner Mark A. Deuble	Art Unit 3651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a): In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-11 and 19-35 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-11 is/are allowed.
- 6) ☒ Claim(s) 19-35 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 27-33 are rejected under 35 U.S.C. 102(b) as being anticipated by van Zijderveld (U.S. Patent No. 6,085,896).

Van Zijderveld shows an assembly with a guide bend 1/2 and a modular conveyor chain 6/7/8/9. The guide bend includes a profile composed of several parts and having a guide face 3/4/5 extending along an axis in a curved manner between straight run-in and run-out parts for guiding the chain modules and a pair of magnets 10/10" detachably fixed relative to the guide face by means of a closing plate 11. The guide face includes a groove 3 in which the chain cooperates. The chain is made of a series of plastic modules 6 which are hingedly coupled with the aid of hinge pins 9 formed of magnetizable or ferromagnetic material (col. 3, ln. 38-41). Thus the magnets would pull successive modules of the chain against the guide face through cooperation with the hinge pins of the chain. Thus van Zijderveld shows all the structure required by claims 27-33.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

4. Claims 19-24 and 33-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over German document number 4338505 in view of van Zijderveld (U.S. Patent No. 6,085,896).

The legs and the projection include magnets 8 detachably connected to the profile by variable magnetic holding parts adjacent the guide face that would pull the body parts of successive modules of a chain to be guided against the upper side of the profile through cooperation with

magnetic hinge pins of a module chain. Thus the German document shows generally all the structure required by claims 19-24 and 33-34 except for a conveyor chain module with magnetizable hinge pins as required by the independent claims.

While the German document does not disclose in detail the structure of the chain guided by the guide bend, van Zijderveld does show the details of a modular conveyor chain that is guided through a guide bend and held against the guide face of the bend magnetically. The chain of van Zijderveld is made of successive plastic modules 6 that are hingedly coupled with the aid of hinge pins 9 formed of magnetizable or ferromagnetic material (col. 3, ln. 33-41). Van Zijderveld teaches that making the hinge pins from a magnetizable or ferromagnetic material advantageously allows the magnets in the guide to hold the chain securely against the guide face through cooperation with the hinge pins of the chain. Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to look to the teachings of van Zijderveld for the specifics of the structure of the chain and to construct the chain accordingly. When this is done, the resulting apparatus would have all the structure required by claims 19-24 and 33-34.

5. Claims 25-26 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over German document number 4338505 in view of van Zijderveld and further in view of Langhans et al. (U.S. Patent No. 4,823,939).

The German document combined with the teachings of van Zijderveld would show generally all the structure required by the claims except for the central projection provided with a side face on an outside bend proceeding in an inwardly converging manner from the upper side of the profile towards the base required by claim 7. However, Langhans et al. shows a guide bend segment 2 with a groove having a side face 7 on an outside bend proceeding in an inwardly

converging manner from the upper side of the upper side of the profile towards the base and a corresponding sliding surface formed by an insert piece 10 forming the side of a modular conveyor belt that converges away from the body part. Langhans et al. teaches that this arrangement advantageously improves the guidance of the conveyor belt. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the central projection of the German document with a side face on an outside bend that proceeds in an inwardly converging manner from the upper side of the profile towards the base in order to improve guidance of the conveyor belt. When this is done the resulting apparatus would have all the structure required by claims 25-26 and 35

8. Claims 19-20, 22-32 and 34-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Damkjaer (U.S. Patent No. 5,127,515) in view of Wallaart (U.S. Patent No. 4,642,298) as in the previous office action.

Damkjaer shows a guide bend segment 9 for a modular conveyor 4 with magnetizable steel hinge pins that is made from several integral profile parts with straight run-in and run-out segments forming a substantially flat upper side 2 extending along an axis in a curved manner (note changes in bold). The segment includes a guide face in which a guide is formed. The guide comprises two grooves proceeding in the longitudinal direction of the profile that are formed between the central projection 6 and legs 2 located outside the grooves on inside and outside bend sides of the projection so that the profile has a substantially E-shaped cross section. The central projection 6 includes a side face 14 that faces the leg 2 on the left side of the figure in order to engage modules of the chain to guide the modules along the axis proceeding in the curved manner. The central projection has a side face 17 on an outside bend that proceeds in an

inwardly converging manner from the upper side of the profile towards the base that corresponds with sliding surfaces 13 of insert pieces 5 forming projections on the underside of the conveyor belt module body. The surfaces 13 converge away from the body part at the sides facing each other of the projections of the modular conveyor belt in order to improve guidance of the conveyor belt. Thus Damkjaer shows all the structure required by the claims except for the magnets detachably connected to the legs of the guide bend segment. However, Wallaart shows a guide bend segment 1 for a modular conveyor belt that has magnets detachably connected within the legs 2/3 of the segment. Wallaart teaches that the magnets in the legs advantageously hold the conveyor belt against the top surface of the guide bend segment to insure smooth running of the conveyor belt. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the legs of the guide bend segment of Damkjaer with detachably connected magnets in order to hold the conveyor belt against the top surface of the guide bend segment to insure smooth running of the conveyor belt according to the teachings of Wallaart. When this is done the resulting apparatus would have all the structure required by claims 19-20, 22-32 and 34-35.

9. Claims 21 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Damkjaer in view of Wallaart as applied to claims 1-2, 4-7, 12-13 and 15-17 above, and further in view of van Zijderveld.

The apparatus of Damkjaer as modified according to the teachings of Wallaart would show generally all the structure required by claim 3 except for the magnets removably connected by means of a closing plate. However, van Zijderveld shows a guide bend segment for a modular conveyor that uses a ferromagnetic closure plate 11 to detachably connect magnets 10

to the guide bend segment. Van Zijderveld teaches that using a ferromagnetic closure plate to secure the magnets to the guide bend segment advantageously increases the force of attraction exerted on the hinge pins of the conveyor. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use a ferromagnetic closing plate to secure the magnets to the legs of the guide bend segment of the apparatus of Damkjaer as modified according to the teachings of Wallaart in order to advantageously increase the force of attraction exerted on the modular conveyor chain according to the teachings of van Zijderveld. When this is done, the resulting apparatus would have all the structure required by claims 21 and 33.

Allowable Subject Matter

6. Claims 8-11 are allowed.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark A. Deuble whose telephone number is (571) 272-6912.

The examiner can normally be reached on Monday through Thursday.

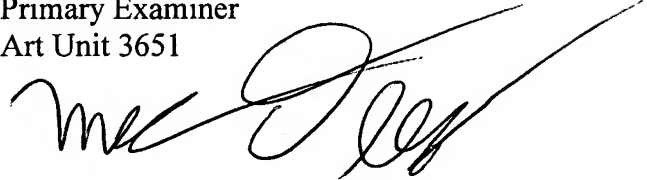
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene O. Crawford can be reached on (571) 272-6911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:
10/538,055
Art Unit: 3651

Page 8

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Mark A. Deuble
Primary Examiner
Art Unit 3651

A handwritten signature in black ink, appearing to read 'Mark A. Deuble', written over a horizontal line.

md

MARK A. DEUBLE
PRIMARY EXAMINER